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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,105	02/04/2004	Paul V. Cooper	23438.00042	3958
7590 05/03/2006			EXAMINER	
SQUIRE, SANDERS & DEMPSEY L.L.P.			KASTLER, SCOTT R	
Two Renaissance Square Suite 2700 40 North Central Avenue Phoenix, AZ 85004-4498			ART UNIT	PAPER NUMBER
			1742	
			DATE MAILED: 05/03/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
Office Author Occurre	10/773,105	COOPER, PAUL V.			
Office Action Summary	Examiner	Art Unit			
	Scott Kastler	1742			
The MAILING DATE of this communication app Period for Reply	ears on the cover sneet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 66(a). In no event, however, may a reply be timediately and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on	_·				
2a) This action is FINAL . 2b) This	☐ This action is FINAL . 2b)☐ This action is non-final.				
3) Since this application is in condition for allowar	·				
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	i3 O.G. 213.			
Disposition of Claims					
4) Claim(s) 1-37 is/are pending in the application.					
4a) Of the above claim(s) is/are withdraw	vn from consideration.				
5) Claim(s) is/are allowed.					
6) Claim(s) is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) <u>1-37</u> are subject to restriction and/or e	election requirement.				
Application Papers					
9) The specification is objected to by the Examine	f.				
10) The drawing(s) filed on is/are: a) acce	epted or b) objected to by the B	Examiner.			
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	∋ 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correcti	•	•			
11) The oath or declaration is objected to by the Ex-	aminer. Note the attached Office	Action or form PTO-152.			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a))-(d) or (f).			
a) ☐ All b) ☐ Some * c) ☐ None of:					
1. Certified copies of the priority documents	s have been received.				
2. Certified copies of the priority documents	• •				
3. Copies of the certified copies of the prior	· ·	ed in this National Stage			
application from the International Bureau * See the attached detailed Office action for a list of	• • • • • • • • • • • • • • • • • • • •	d			
See the attached detailed Office action for a list of	or the certified copies not receive	u.			
Attachment(s)	∧ □ •	(DTO 440)			
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) 🔲 Interview Summary Paper No(s)/Mail Da				
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal P 6) Other:	atent Application (PTO-152)			
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Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-7, drawn to a molten metal pump, classified in class 266, subclass 239.
- II. Claims 8-15 and 25-37, drawn to a rotor shaft, classified in class 464, subclass179.
- III. Claims 16-20, drawn to a coupling, classified in class 403, subclass 342.
- IV. Claims 21-24, drawn to a rotor, classified in class 416, subclass 97.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II-IV are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the pump of Group I does not require all of the specific structure recited in the particular couplings, rotors and rotary shafts of Groups II-IV. The subcombinations have separate utility such as Use in other, prior art molten metal pumps.

Inventions II, III and IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, each subcombination has separate utility such as use alone, with other prior art components in a prior art molten metal pump or impeller. See MPEP § 806.05(d).

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Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Kastler whose telephone number is (571) 272-1243. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Scott Kastler Primary Examiner Art Unit 1742

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